Commonwealth of Kentucky
Division for Air Quality

RESPONSE TO COMMENTS

ON THE TITLE V DRAFT PERMIT V-05-068
Free-Flow Packaging International, Inc.
1 Graham Way
Hopkinsville, KY 402240
January 20, 2006
Ralph Gosney, P.E., Reviewer

SOURCE I.D. #:	021-047-00099
SOURCE A.I. #:	37673
ACTIVITY #:	APE20040001

SOURCE DESCRIPTION:

Free Flow Packaging International (F P International), Incorporated produces foamed polyethylene and polystyrene sheets for packaging. In the polyethylene foam plant, polyethylene along with isobutane, ethane, and glycerol monostearate are used as the raw materials and are injected into the extruder. The extruded foamed polyethylene sheets go through the slit tube and winder. The wound foamed polyethylene sheets are stored in the warehouse. The bad sheets (approximately 8%) are reprocessed to get polyethylene resin. The major emissions from this process are the VOC's (Isobutane emissions). The source also has isobutane and ethane storage tanks. The isobutane tanks are pressurized tanks. The ethane tanks are tube trailers and are not filled on site. They are replaced as needed.

In the polystyrene loosefill plant, polystyrene is fed to an extruder where it is melted and pressurized and injected with a blowing agent mixture of isopentane and isobutane. As the material exits the extruder it creates a plastic foam which is then formed into a trademark "Figure 8" cross-section, cooled, and cut into finite pieces. The cut particles from the extrusion line are then passed through an expander where they are exposed to live steam. The particles are then held for several hours in the intermediate storage silos while additional expansion occurs. The particles are then put through a second expansion step in which they are again exposed to live steam. The expanded product is dried in the hot room, which is heated to approximately 140˚F. The product from the hot room is transferred to the warehouse where it is stored until it is packaged in fourteen cubic foot bags or loaded directly into bulk trailers for shipment.

The source consists of a Polyethylene (PE) Foam Plant and Polystyrene (PS) Loosefill Plant, and related process equipment used in the manufacture of PE foam sheets and PS loosefill.

PUBLIC AND U.S. EPA REVIEW:

On December 19, 2005, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in the *Kentucky New Era* in Hopkinsville, Kentucky. The public comment period expired 30 days from the date of publication.

No comments were received during this period. The permit is now being issued as a proposed permit. The U.S. EPA has 45 days from the date of the issuance to submit comments. If no comments are received during this period, the Division will consider the permit final as conditioned.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.